

REJECTION UNDER 35 U.S.C. § 103(a):

Claims 4-7 and 9-11 stand rejected under 35 USC § 103(a) as being obvious over the prior art set forth in the present application on pages 1-5 and FIGS. 11-12 (Prior Art), in view of Ishikawa et al., U.S. Patent No. 5,600,455. This rejection is respectfully traversed.

The outstanding Office Action indicates that it would have been obvious to modify Prior Art, in view of the teaching of Ishikawa et al., to set forth the presently claimed invention. Specifically, the Examiner recites that because Ishikawa et al. teaches to partially coarsen prism shaped elements on a transparent member to, it would have been obvious to partially coarsen the prism shaped elements in Prior Art.

For motivation, the Office Action details that the motivation for modifying Prior Art to include such coarsened prism elements is to provide a more uniform light distribution.

Specifically, the Office Action recites: "[i]n particular, the important thing disclosed/suggested to one skilled in the art made by Ishikawa et al. is that they teach that one of the two slopes constituting each of the prism/projection is roughed/roughed for the purpose of providing a more uniform in light distribution after light passing through such a prism."

It is respectfully submitted that Ishikawa et al., and what Ishikawa et al. teaches, is misunderstood.

Ishikawa et al. sets forth surface light source display having a surface light source 3, a diffusing layer 7, a prism sheet 1, and an LCD panel 4. As explained in the background of Ishikawa et al., since the diffusing layer 7 causes light to be directed in many different directions it is necessary to use prism sheet 1 to redirect exiting light into a more perpendicular direction, i.e., perpendicular from the surface of the light source 3. Thus, using the prism sheet 1 causes light to actually be narrowed toward this perpendicular direction.

An invention of Ishikawa et al. includes a modification of the diffusing layer 7, as detailed beginning in col. 4, line 30, through the end of the specification, e.g., "[a] bright and uniform surface light source device using a light conducting member can be obtained by taking the construction of the diffusing plate as shown in FIG. 12 into the device." Ishikawa et al. in col. 5, lines 34-38.

Thus, by modifying diffusion layer 7, Ishikawa et al. discloses a way of providing a more

uniform light distribution.

Another completely different invention is the coarsening of one or more surfaces of the prism sheet 1 to prevent the production of Moire stripe patterns. See Ishikawa et al. beginning in col. 3, lines 26-59.

Ishikawa et al. illustrates in FIG. 10 an example of an arrangement of prism sheets to perform the aforementioned redirecting of light. However, as discussed in Ishikawa et al., stripe patterns similar to FIG. 4 may be generated. **To solve this problem of stripe patterns one or more surfaces of the prism sheet are coarsened.**

Thus, the coarsening of surfaces of the prism sheet is not performed to provide a more uniform light distribution. Rather, the discussion of the generating of the uniform light distribution in Ishikawa et al. **only** relates to a modification of a diffusing layer, unrelated to the coarsening of the prism sheet.

Therefore, the cited motivation relied upon by the Office Action is **not** applicable.

One skilled in the art at the time of the invention would not have coarsened the prism sheet surfaces to generate a more uniform light distribution. Rather, they might have used the improved diffusion layer, which does generate the more uniform light distribution. The coarsening of the prism sheet is not related to the generation of uniform light distribution, in Ishikawa et al.

In addition, as noted previously there would not have been motivation to modify Prior Art to include the prism sheet coarsening set forth in Ishikawa et al.

Prior Art sets forth a light control element in a light emitting surface light source. As illustrated in FIGS. 13 and 14, light which enters light control element 5 is redirected in a direction perpendicular to an exiting surface of a light guide plate, **and is thereafter diffused by a diffusing sheet 6.** Diffusing sheet 6 prevents the showing of stripe patterns.

The Office Action indicates that Prior Art would suffer from the same stripe pattern problem that Ishikawa et al. overcomes, and thus there would have been motivation for modifying Prior Art in a similar fashion as set forth in Ishikawa et al.

Specifically, col. 1, line 63, through col. 2, line 4, of Ishikawa et al. recites: "[w]hen disposing this transparent member between the surface light source device and the liquid

crystal display panel as shown in FIG. 1, such trouble sometimes happens that a direction 1a along which the top lines of the triangle portions are extended...is or lies upon bus lines of the liquid crystal display panel 4, and a stripe pattern as Moire, which is not desired, is generated."

However, as illustrated in FIGS. 13 and 14 of the present application, corresponding to Prior Art, light exiting prism sheet 5 is directly thereafter diffused by light diffusing sheet 6. Thus, in Prior Art, the problem discussed in Ishikawa et al. **is not** relevant, as although the direction "along which the top lines of the triangle portions [is] extended is or lies upon bus lines of the liquid crystal display panel," **the light diffusing sheet of Prior art will diffuse the light exiting the prism sheet sufficiently to prevent the occurrence of the striped lines.** FIG. 14 of the present application, corresponding to Prior Art, illustrates how light striking the top and bottom portions of the prisms on the prism sheet are diffused prior to hitting any liquid crystal display panel.

In addition, as illustrated in FIG. 3, light exiting the prism sheet is redirected in a more diffused manner, which would also appear to prevent the generation of strip patterns, whereas in Ishikawa et al. the outward orientation of the prism sheet redirects light more inward toward a perpendicular direction thereby allowing for the generation of the striped pattern.

Thus, the striped line problem discussed in Ishikawa et al. would **not** occur in the system of Prior Art.

Further, again it is noted that Ishikawa et al. and Prior Art are directed to two separate prism type arrangements, each with their own problems and corresponding specific solutions. The present invention, and that as recited in the claims, is directed to solve problems associated with a "prism portion **inward** arrangement," such as that of Prior Art, whereas Ishikawa et al. is directed to solve problems associated with a "prism portion **outward** arrangement." The problems associated with an **inward** prism arrangement of Prior Art are different from the problems associated with an **outward** prism arrangement of Ishikawa et al., and corresponding specific solutions cannot be merely interchanged between the two types of arrangements, as one problem in an outward prism arrangement may not be present in an inward prism arrangement, e.g., the solution provided in Ishikawa et al. is not relevant to Prior Art as Prior Art does not suffer from the same problem.

This point is more evident when the use of the prism sheets in both Prior Art and

Ishikawa et al. are reviewed. In Prior Art, the inward oriented prism sheet is used to redirect light received from a light guide plate. Conversely, in a completely different operation, Ishikawa et al. utilizes an outward oriented prism sheet to redirect output light toward, for example, an LCD panel.

The implementation of the prism sheets of Prior Art and Ishikawa et al. are for totally different.

Since the prism sheets perform completely different operations this would actually teach away from one skilled in the art looking to the coarsening of an outward oriented prism sheet of Ishikawa et al. and implementing a similar coarsening in the inward oriented prism sheet of Prior Art.

Lastly, in response to applicant's previous remarks, the Office Action indicates, beginning on page 6, that there is motivation to combine the coarsening of Ishikawa et al. in Prior Art, since: a) Prior Art is similar to the claims, except for the coarsening of the prism sheet; b) Ishikawa et al. teaches to use coarsening of a prism sheet to generate a uniform light distribution; and c) Prior Art and Ishikawa et al. are in related fields.

The Examiner bears the burden of establishing a prima facie case of obviousness based upon the prior art..."[the Examiner] can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would **lead** that individual to combine the relevant teachings of the references." In re Fritch, 23 USPQ 2d 1780, 1783 (Fed. Cir. 1992).

In addition, the mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification. Id. at 1783-84.

Thus, there must be some reason for modifying Prior Art, e.g., Prior Art must need or desire such a modification.

However, the Office Action has not detailed why Prior Art would need an improved uniform light distribution. There is no evidence that the completely differently oriented prism sheet (used for a completely different purpose) has a faulty or deficient uniform light distribution.

In addition, as noted above, the Office Action is actually incorrect in the conclusion that the coarsening of the prism surfaces improves uniform light distribution. The coarsening of the prism sheet surfaces is performed to prevent the generation of stripe patterns

Therefore, for at least the above, it is respectfully requested that the outstanding rejection of claims 4-7 and 9-11 be withdrawn and claims 4-7 and 9-11 be allowed.

CONCLUSION:

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

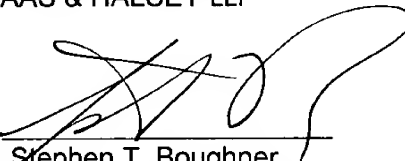
Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Response, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: 1/29/23

By: 
Stephen T. Boughner
Registration No. 45,317

700 Eleventh Street, NW, Suite 500
Washington, D.C. 20001
(202) 434-1500